Mississippi River Gulf of Mexico Watershed Nutrient Task Force

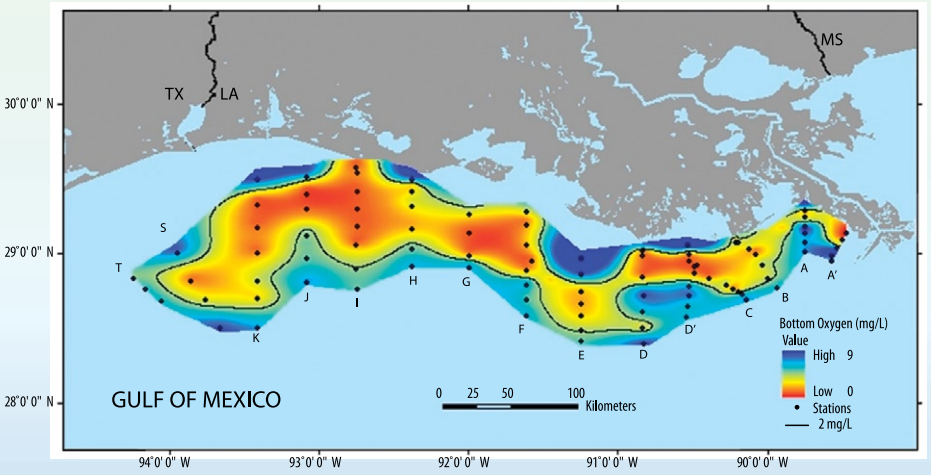
Moving Forward on Gulf Hypoxia

What's hypoxia?

Areas of low oxygen that cannot sustain marine life. Hypoxia is a worldwide problem caused by excess nutrients, primarily nitrogen and phosphorus, which feed intensive growths of algae. The algae deplete the oxygen in the water when they die, sink to the bottom, and decompose. One of the largest hypoxic areas in the world is found in the Gulf of Mexico where nutrients, originating from the great productivity of Middle American cities, farms, and industries, flow into the Gulf from the Mississippi and Atchafalaya Rivers. This vast area of hypoxia forms every summer off the coasts of Louisiana and Texas and threatens to change the biology and economic productivity of the region. More than 30 years after the passage of the Clean Water Act, in 2007 the Gulf hypoxic zone was the third largest on record – 20,500 square kilometers – bigger than the State of Massachusetts.

Why is it still there?

The geographical separation of the source of the problem from the impacts in the Gulf, coupled with the immense size and scale of the hypoxic zone result in an environmental problem laden with obstacles. The greatest source of pollution causing the hypoxic zone in the Gulf is nonpoint source runoff from agriculture. Nonpoint sources, including atmospheric deposition, contributed 78% and 66% of nitrogen and phosphorus loads to the Gulf, respectively. Additionally, physical changes to the Mississippi River for flood control and navigation contribute to the persistence of the Gulf hypoxic zone. Adapting to changes in the river and the agricultural landscape while balancing the needs and priorities of millions of stakeholders in thousands of jurisdictions are just a few of the challenges.



Areal Extent of 2007 Hypoxic Zone

Data courtesy of N. Rabalais and A. Sapp

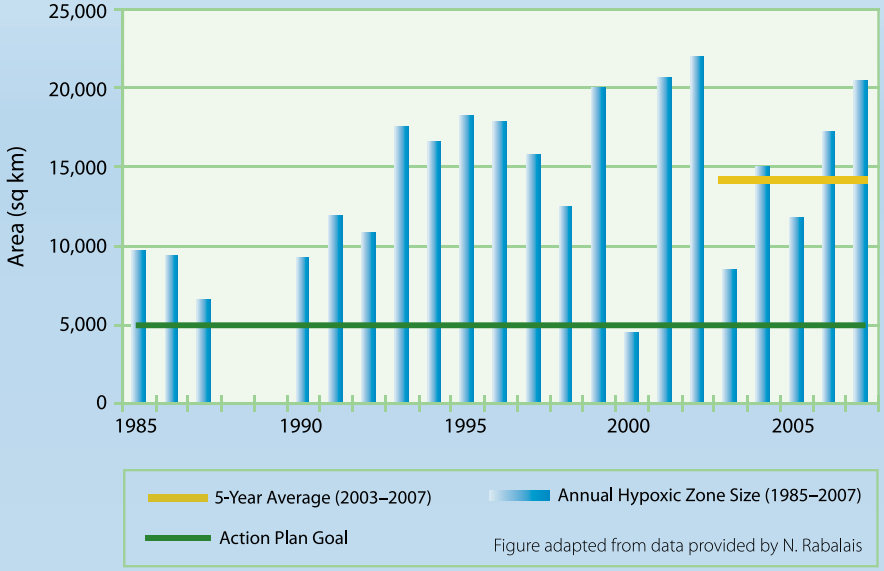


Figure adapted from data provided by N. Rabalais

What is the Task Force doing about it?

The Task Force, a partnership of state and federal agencies established in 1997, has continued to make progress by relying on voluntary programs from states and landowners to achieve nutrient reductions throughout the Mississippi River Basin. Solutions must balance environmental, cultural, and economic demands to protect coastal fisheries and resources, water quality in the basin, and the agricultural and industrial sector of the United States. Despite limited resources, the Task Force has been carrying out 2001 Action Plan for Reducing, Mitigating, and Controlling Hypoxia in the Northern Gulf of Mexico and has just completed a revision, the 2008 Gulf Hypoxia Action Plan. The new plan identifies specific actions for stakeholders throughout the Mississippi Basin, however the most significant critical need is to secure additional political and financial support for actions led by the Task Force members, other states and non-governmental organizations, and citizens.

How is the 2008 Action Plan different from the last Plan?

The 2008 Action Plan greatly increases accountability and specificity through the inclusion of an Annual Operating Plan and an Annual Report that identifies actions by the state and federal partners on the Task Force and tracks progress towards the goals of the Plan. Other improvements include state-led nutrient reduction strategies, complementary federal strategies, and an outreach plan to increase national awareness and engage stakeholders like you.

Tell me more.

Visit the Web site to read the 2008 Action Plan and learn more about hypoxia and Task Force successes. Become involved by helping the Task Force to preserve an ecosystem of environmental and national significance at:

www.epa.gov/msbasin

Members of the Task Force

State Agencies

Arkansas Natural Resources Commission
Illinois Department of Agriculture
Iowa Department of Agriculture and Land Stewardship
Louisiana Governor's Office of Coastal Activities
Minnesota Pollution Control Agency
Mississippi Department of Environmental Quality
Missouri Department of Natural Resources
Ohio Department of Natural Resources
Tennessee Department of Agriculture
Wisconsin Department of Natural Resources

Federal Agencies

U.S. Army Corps of Engineers
U.S. Department of Agriculture
U.S. Department of Commerce
(National Oceanic and Atmospheric Administration)
U.S. Department of the Interior
(U.S. Geological Survey)
U.S. Environmental Protection Agency

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